



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,152	09/05/2000	Markus Weisbeck	MO-5845/LEA3	6993

157 7590 01/17/2003

BAYER CORPORATION
PATENT DEPARTMENT
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER

JOHNSON, EDWARD M

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 01/17/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,152

Applicant(s)

WEISBECK ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,8-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>18</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/02 has been entered.

It is noted that new claim 13 has been renumbered as claim 14 under Rule 1.26, since there was already a claim 13 in the application at the time of Applicant's 12/19/02 submission.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 8-11, and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 specifies the use of a catalyst for oxidation of unsaturated hydrocarbons, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. Examiner suggests replacing "used for" with --deactivated by--.

Claim 13 depends from a canceled claim.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 6 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1754

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6-7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. WO 9602323A1 (translated in US Pat. No. 5,859,265).

Regarding claim 6, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3) comprising contacting the catalyst with a solution of hydrogen peroxide in mineral acid (see column 5, lines 16-18), wherein the catalyst is used in various oxidation processes (see column 1, lines 10-11).

Regarding claim 9, the claimed range of hydrogen peroxide includes zero and Muller '265 discloses catalyst in contact with 0.196% hydrogen peroxide (see Example 3).

Regarding claim 10, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3).

Regarding claim 11, Muller '265 discloses gas phase olefin epoxidation in the presence of hydrogen (see column 4, lines 6-61).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller '265 as applied to claim 6 above, and further in view of Bowman et al. 6,031,116.

Muller fails to disclose contacting the catalyst being regenerated with steam under pressure.

Bowman '116 discloses adding water into the gas (see column 12, lines 50-67 and column 13, lines 1-6).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the water of Bowman with the oxidation catalyst regeneration of Muller because Bowman discloses his water to be beneficially added to the regeneration gas stream, for oxidation catalyst regeneration (title and abstract) and Muller discloses high temperature regeneration in inert gas or solution (see column 5, lines 9-18).

Regarding claim 14, Muller '265 discloses acidic pH (see column 5, lines 15-16) and Bowman '116 discloses washing with water at a pH of 5-11 (see column 9, lines 40-42).

Response to Arguments

10. Applicant's arguments filed 12/19/02 have been fully considered but they are not persuasive.

The objection and some rejections under 35 USC 112(2) have been withdrawn in view of Applicant's amendment.

It is argued that Applicants respectfully contend that the Examiner has failed to point to where Muller et al. does so. This is not persuasive because Applicant appears to suggest that the open language recitation, "a titanium dioxide or a hydrous titanium dioxide support", necessarily excludes a prior art catalyst "based on titanium dioxide and silicon dioxide". However, since Applicant claims a process for regeneration with open language "comprising", additional ingredients to the process catalyst, such as silicon dioxide, are not excluded by the claim. Therefore, the recitation of titanium dioxide is met notwithstanding the presence of silicon dioxide in the prior art.

It is argued that clearly, there is no such teaching, suggestion or motivation shown in the references in this case. This is not persuasive because Applicant's comments with respect

Art Unit: 1754

to the rejection above are not found persuasive. Bowman is relied upon for adding water to the gas, as noted by the Examiner in the instant and previous Office Actions.

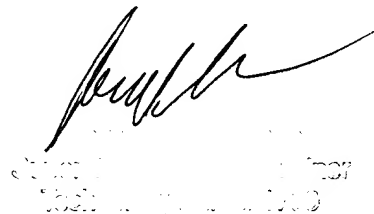
Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ
January 15, 2003



Edward M. Johnson
Examiner
Art Unit 1754